## SEQUENCE LISTING

- <110> AXEN, ANDREAS BAUMANN, HERBERT CARREDANO, ENRIQUE
- <120> IMMUNOGLOBULIN G BINDING POCKET
- <130> PU0284
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- <151> 2003-09-12
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- <160> 40
- <170> PatentIn Ver. 3.3
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- <213> Homo sapiens
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- Asp Arg Val Asn Ile Ala Cys Arg Ala Ser Gln Gly Ile Ser Ser Ala
- Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Arg Leu Leu Ile 35 40 45
- Tyr Asp Ala Ser Asn Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60
- Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
  65 70 75 80
- Glu Asp Phe Ala Ile Tyr Tyr Cys Gln Gln Phe Asn Ser Tyr Pro Leu 85 90 95
- Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
  100 105 110
- Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
  115 120 125
- Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala 130 135 140
- Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln 145 150 155 160

Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser 165 170 175

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr 180 185 190

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser 195 200 205

Phe Asn Arg Gly Glu Cys 210

<210> 2

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<400> 2

Gln Val Lys Leu Glu Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
1 5 10 15

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Ser 20 25 30

Tyr Gly Leu His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp 35 40 45

Met Gly Trp Ile Ser Ala Gly Thr Gly Asn Thr Lys Tyr Ser Gln Lys 50 60

Phe Arg Gly Arg Val Thr Phe Thr Arg Asp Thr Ser Ala Thr Thr Ala 65 70 75 80

Tyr Met Gly Leu Ser Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr
85 90 95

Cys Ala Arg Asp Pro Tyr Gly Gly Gly Lys Ser Glu Phe Asp Tyr Trp 100 105 110

Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro 115 120 125

Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr 130 135 140

Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr 145 150 155 160

Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro

Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr 180 185 190

Val Pro Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn 195 200 205 His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser 210 215 220

Cys 225

<210> 3

<211> 105

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<213> Homo sapiens

<400> 3

Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu
1 5 10 15

Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro 20 25 30

Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly 35 40 45

Asn Ser Gln Glu Ser Val Thr Glx Glx Asp Ser Lys Asp Ser Thr Tyr 50 60

Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His 65 70 75 80

Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val 85 90 95

Thr Lys Ser Phe Asn Arg Gly Glu Cys

<210> 4

<211> 121

<212> PRT

<213> Homo sapiens

<400> 4

Thr Pro Leu Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg Thr 1 5 10 15

Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu 20 25 30

Lys Ser Gly Thr Ala Ser Val Val Asx Leu Leu Asn Asn Phe Tyr Pro 35 40 45

Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly
50 55 60

Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr 65 70 75 80 Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His

Lys Val Tyr Ala Asx Glu Val Thr His Gln Gly Leu Ser Ser Pro Val

Thr Lys Ser Phe Asn Arg Gly Glu Asx 115 120

<210> 5

<211> 121

<212> PRT

<213> Homo sapiens

<400> 5

Ser Pro Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg Thr 1 5 10 15

Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu 20 25 30

Lys Ser Gly Thr Ala Ser Val Val Gly Leu Leu Asn Asn Phe Tyr Pro 35 40 45

Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly 50 60

Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr 65 70 75 80

Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His

Lys Val Tyr Ala Gly Glu Val Thr His Gln Gly Leu Ser Ser Pro Val

Thr Lys Ser Phe Asn Arg Gly Glu Gly 115 120

<210> 6

<211> 105

<212> PRT

<213> Homo sapiens

<400> 6

Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln 1 5 10 15

Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr 20 25 30

Pro Arg Glu Ala Lys Val Gln Trp Val Asp Asn Ala Leu Gln Ser Gly 35 40 45

Asn Ser Gln Glu Ser Val Thr Glu Gln Glu Ser Lys Asp Ser Thr Tyr
50 55 60

Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His 65 70 75 80

Lys Val Tyr Ala Gly Glu Val Thr His Gln Gly Leu Ser Ser Pro Val

Thr Lys Ser Phe Asn Arg Gly Glu Cys 100 105

<210> 7

<211> 121

<212> PRT

<213> Homo sapiens

<400> 7

Trp Phe Arg Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr 1 5 10 15

Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu 20 25 30

Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr His  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly 50 60

Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr 65 70 75 80

Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His

Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val

Thr Lys Ser Phe Asn Arg Gly Glu Cys 115 120

<210> 8

<211> 106

<212> PRT

<213> Homo sapiens

<400> 8

Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln
1 5 10 15

Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr 20 25 30

Pro Arg Glu Ala Lys Val Gln Arg Lys Val Asp Asn Ala Leu Gln Ser 35 40 45

Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Glu Ser Lys Asp Ser Thr 50 60

Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys 65 70 75 80

His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro \$85\$ 90 95

Val Thr Lys Ser Phe Asn Arg Gly Glu Cys 100 105

<210> 9

<211> 121

<212> PRT

<213> Homo sapiens

<400> 9

Phe Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Arg Thr 1 5 10 15

Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu 20 25 30

Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asp Asp Phe Tyr Pro 35 40 45

Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly 50 60

Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr
65 70 75 80

Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His
85 90 95

Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val

Thr Lys Ser Phe Asn Arg Gly Glu Cys 115 120

<210> 10

<211> 121

<212> PRT

<213> Homo sapiens

<400> 10

Phe Pro Phe Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys Arg Thr 1 5 10 15

Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu 20 25 30

Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro 35 40 45 Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly 50 60

Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr
65 70 75 80

Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His

Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val 100 105 110

Thr Lys Ser Phe Asn Arg Gly Glu Cys 115 120

<210> 11

<211> 95

<212> PRT

<213> Homo sapiens

<400> 11

Tyr Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg

1 5 10 15

Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln 20 25 30

Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr 35 40 45

Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser 50 60

Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr 65 70 75 80

Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu 85 90 95

<210> 12

<211> 131

<212> PRT

<213> Homo sapiens

<400> 12

Ile Glu Leu Asp Ile Val Val Val Pro Ala Pro Met Arg Gly Ser Leu 1 5 10 15

Gly Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala 20 25 30

Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser

Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe 50 60

Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly 65 70 75 80

Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu 85 90 95

Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr 100 105 110

Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys

Val Glu Pro 130

<210> 13

<211> 100

<212> PRT

<213> Homo sapiens

<400> 13

Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys

1 5 10 15

Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr 20 25 30

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser

Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser 50 60

Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr 65 70 75 80

Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys 85 90 95

Lys Val Glu Pro 100

<210> 14

<211> 140

<212> PRT

<213> Homo sapiens

<400> 14

Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg
1 5 10 15

Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr 20 25 30

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser 35 40 45

Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser 50 55 60

Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr 65 70 75 80

Tyr Thr Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys 85 90 95

Arg Val Glu Leu Lys Thr Pro Leu Gly Asp Thr Thr His Thr Cys Pro 100  $\phantom{-}$  105  $\phantom{-}$  110

Arg Cys Pro Glu Pro Lys Ser Cys Asp Thr Pro Pro Pro Cys Pro Arg 115 120 125

Cys Pro Glu Pro Lys Ser Cys Asp Thr Pro Pro Pro 130 135 140

<210> 15

<211> 140

<212> PRT

<213> Homo sapiens

<400> 15

Ala Ser Phe Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg

1 5 10 15

Ser Thr Pro Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr 20 25 30

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser 35 40 45

Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser 50 60

Leu Ser Ser Val Val Tyr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr 65 70 75 80

Tyr Thr Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys 85 90 95

Arg Val Glu Leu Lys Thr Pro Leu Gly Asp Thr Thr His Thr Cys Pro

Arg Cys Pro Glu Pro Lys Ser Cys Asp Thr Pro Pro Pro Cys Pro Arg

Cys Pro Glu Pro Lys Ser Cys Asp Thr Pro Pro Pro 130 135 140

<210> 16

<211> 117

<212> PRT

<213> Homo sapiens

<400> 16

Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg Ser 1 5 10 15

Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe 20 25 30

Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly 35 40 45

Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu 50 60

Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr 65 70 75 80

Thr Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Arg 85 90 95

Val Glu Leu Lys Thr Pro Leu Gly Asp Thr Thr His Thr Cys Pro Arg

Cys Pro Glu Pro Lys 115

<210> 17

<211> 117

<212> PRT

<213> Homo sapiens

<400> 17

Phe Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg Ser 1 5 10 15

Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe  $20 \hspace{1cm} 25 \hspace{1cm} 30$ 

Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly 35 40 45

Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu 50 55 60

Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr
65 70 75 80

Thr Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Arg

Val Glu Leu Lys Thr Pro Leu Gly Asp Thr Pro Pro Pro Cys Pro Arg

Cys Pro Glu Pro Lys 115

<210> 18

<211> 103

<212> PRT

<213> Homo sapiens

<400> 18

Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg Ser 1 5 10 15

Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe 20 25 30

Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly 35 40 45

Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu 50 60

Ser Ser Val Val Thr Val Pro Ser Ser Asn Phe Gly Thr Gln Thr Tyr 65 70 75 80

Thr Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys Val Asp Lys Thr 85 90 95

Val Glu Arg Lys Cys Cys Val 100

<210> 19

<211> 128

<212> PRT

<213> Homo sapiens

<400> 19

Ile Ile Tyr Phe Asp Tyr Ala Asp Phe Ile Met Asp Tyr Trp Gly Gln  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Gly Thr Thr Val Thr Val Ser Thr Ala Ser Thr Lys Gly Pro Ser Val  $20 \\ 25 \\ 30$ 

Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala 35 40 45

Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser 50 55 60

Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val 65 70 75 80

Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro 85 90 95

Ser Ser Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys

Pro Ser Asn Thr Lys Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val 115 120 125

<210> 20

<211> 103

<212> PRT

<213> Homo sapiens

<400> 20

Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg

1 10 15

Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr 20 25 30

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser 35 40 45

Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser 50 60

Leu Ser Ser Trp Thr Val Pro Ser Ser Asn Phe Gly Thr Gln Thr Tyr 65. 70 75 80

Thr Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys Val Asp Lys Thr 85 90 95

Val Glu Arg Lys Cys Cys Val 100

<210> 21

<211> 104

<212> PRT

<213> Homo sapiens

<400> 21

Ala Ser Phe Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg 1 5 10 15

Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr 20 25 30

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser 35 40 45

Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser 50 55 60

Leu Ser Ser Val Val Thr Val Pro Ser Ser Asn Phe Gly Thr Gln Thr 65 70 75 80

Tyr Thr Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys Val Asp Lys
85 90 95

Thr Val Glu Arg Lys Cys Cys Val

<210> 22

<211> 103

<212> PRT

<213> Homo sapiens

<400> 22

Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg Ser  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe 20 25 30

Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly 35 40 45

Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu 50 55 60

Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Lys Thr Tyr 65 . 70 . 75 . 80

Thr Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys Val Asp Lys Arg
85 90 95

Val Glu Ser Lys Tyr Gly Pro 100

<210> 23

<211> 128

<212> PRT

<213> Homo sapiens

<400> 23

Ile Ile Tyr Phe Asp Tyr Ala Asp Phe Ile Met Asp Tyr Trp Gly Gln
1 5 10 15

Gly Thr Thr Val Thr Val Ser Thr Ala Ser Thr Lys Gly Pro Ser Val 20 25 30

Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala 35 40 45

Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser 50 60

Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val 65 70 75 80

Leu Gln Xaa Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro 85 90 95 Ser Ser Ser Leu Gly Thr Lys Thr Tyr Thr Cys Asn Val Asp His Lys 100 105 110

Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu Ser Lys Tyr Gly Pro 115 120 125

<210> 24

<211> 104

<212> PRT

<213> Homo sapiens

<400> 24

Ala Ser Phe Lys Gly Pro Ser Val Phe Pro Leu Val Pro Cys Ser Arg

1 10 15

Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr 20 25 30

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Cys Ala Leu Thr Ser 35 40 45

Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser 50 55 60

Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Lys Thr 65 70 75 80

Tyr Thr Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys Val Asp Lys
85 90 95

Arg Val Glu Ser Lys Tyr Gly Pro 100

<210> 25

<211> 105

<212> PRT

<213> Homo sapiens

<400> 25

Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser 1 5 10 15

Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe
20 25 30

Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly 35 40 45

Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu 50 55 60

Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr 65 70 75 80

Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Arg
85 90 95

Val Glu Pro Lys Ser Cys Asp Lys Thr 100 105

<210> 26

<211> 120

<212> PRT

<213> Homo sapiens

<400> 26

Arg Asp Thr Ala Met Phe Phe Ala His Trp Gly Gln Gly Thr Leu Val

Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala 20 25 30

Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu 35 40 45

Val Lys Asp Tyr Phe Pro Gln Pro Val Thr Val Ser Trp Asn Ser Gly 50 60

Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser 65 70 75 80

Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu 85 90 95

Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr 100 105 110

Lys Val Asp Lys Lys Val Glu Pro 115 120

<210> 27

<211> 127

<212> PRT

<213> Homo sapiens

<400> 27

Gly Gly His Gly Phe Cys Ser Ser Ala Ser Cys Phe Gly Pro Asp Tyr

1 10 15

Trp Gly Gln Gly Thr Pro Val Thr Val Ser Ser Ala Ser Thr Lys Gly

Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly 35 40 45

Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Gln Pro Val
50 55 60

Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe 65 70 75 80

Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val 85 90 95

Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val

Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu Pro 115 120 125

<210> 28

<211> 118

<212> PRT

<213> Homo sapiens

<400> 28

Val Pro Leu Val Val Asn Pro Trp Gly Gln Gly Thr Leu Val Thr Val

1 10 15

Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser 20 25 30

Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys 35 40 45

Asp Tyr Phe Pro Gln Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu 50 55 60

Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu 65 70 75 80

Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr 85 90 95

Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val

Asp Lys Arg Val Ala Pro 115

<210> 29

<211> 113

<212> PRT

<213> Homo sapiens

<400> 29

Phe Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ala Ala Lys

1 10 15

Thr Thr Pro Pro Ser Val Tyr Pro Leu Ala Pro Gly Ser Ala Ala Gln 20 25 30

Thr Asn Ser Met Val Thr Leu Gly Cys Leu Val Lys Gly Tyr Phe Pro 35 40 45

Glu Pro Val Thr Val Thr Trp Asn Ser Gly Ser Leu Ser Ser Gly Val

His Thr Phe Pro Ala Val Leu Gln Ser Asp Leu Tyr Thr Leu Ser Ser 65 70 75 80

Ser Val Thr Val Pro Ser Ser Thr Trp Pro Ser Glu Thr Val Thr Cys 85 90 95

Asn Val Ala His Pro Ala Ser Ser Thr Lys Val Asp Lys Lys Ile Val
100 105 110

Pro

<210> 30

<211> 125

<212> PRT

<213> Homo sapiens

<400> 30

Val Leu Phe Gln Gln Leu Val Leu Tyr Ala Pro Phe Asp Ile Trp Gly

1 10 15

Gln Gly Thr Met Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser 20 25 30

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala 35 40 45

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Gln Pro Val Thr Val 50 60

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala 65 70 75 80

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val 85 90 95

Pro Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His 100 \$105\$

Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro 115 120 125

<210> 31

<211> 127

<212> PRT

<213> Homo sapiens

<400> 31

Arg Asp Tyr Tyr Asp Ser Gly Gly Tyr Phe Thr Val Ala Phe Asp Ile

Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Ala Ser Thr Lys Gly
20 25 30

Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly
35 40 45

Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val
50 60

Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe 65 70 75 80

Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val 85 90 95

Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val

Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro 115 120 125

<210> 32

<211> 134

<212> PRT

<213> Homo sapiens

<400> 32

Gly Ala Gly Val Thr Leu Val Arg Gly Ala Ile Lys Pro Ser Pro Asp 1 5 10 15

Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val 20 25 30

Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser 35 40 45

Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys 50 60

Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu 65 70 75 80

Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu
85 90 95

Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr 100 105 110

Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val 115 120 125

Asp Lys Arg Val Glu Pro 130 <210> 33

<211> 127

<212> PRT

<213> Homo sapiens

<400> 33

Gly Gly His Gly Phe Cys Ser Ser Ala Ser Cys Phe Gly Pro Asp Tyr  $\frac{1}{5}$   $\frac{5}{10}$   $\frac{10}{15}$ 

Trp Gly Gln Gly Thr Pro Val Thr Val Ser Ser Ala Ser Thr Lys Gly 20 25 30

Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly 35 40 45

Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Gln Pro Val

Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe 65 70 75 80

Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val

Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val 100 105 110

Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu Pro 115 120 125

<210> 34

<211> 111

<212> PRT

<213> Homo sapiens

<400> 34

Gly Asp Val Tyr Asn Arg Gln Trp Gly Gln Gly Thr Leu Val Thr Val 1 5 10 15

Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser 20 25 30

Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Asx Leu Val Lys  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu 50 60

Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu 65 70 75 80

Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr
85 90 95

Gln Thr Tyr Ile Asx Asn Val Asn His Lys Pro Ser Asn Thr Lys

<210> 35

<211> 118

<212> PRT

<213> Homo sapiens

<400> 35

Gly Asp Val Tyr Asn Arg Gln Trp Gly Gln Gly Thr Leu Val Thr Val

1 5 10 15

Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser

Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys

Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu 50 55 60

Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu 65 70 75 80

Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr 85 90 95

Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val

Asp Lys Arg Val Glu Pro 115

<210> 36

<211> 117

<212> 'PRT

<213> Homo sapiens

<400> 36

Asp Val Tyr Asn Arg Gln Trp Gly Gln Gly Thr Leu Val Thr Val Ser 1 5 10 15

Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser 20 25 30

Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu Val Lys Asp

Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr 50 55 60

Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr
65 70 75 80

Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Asn Phe Gly Thr Gln
85 90 95

Thr Tyr Thr Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys Val Asp 100 105 110

Lys Thr Val Glu Arg 115

<210> 37

<211> 122

<212> PRT

<213> Homo sapiens

<400> 37

Pro Tyr Gly Gly Gly Lys Ser Glu Phe Asp Tyr Trp Gly Gln Gly Thr 1 5 10 15

Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro
20 25 30

Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly 35 40 45

Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn 50 55 60

Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln 65 70 75 80

Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser 85 90 95

Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser 100 105 110

Asn Thr Lys Val Asp Lys Lys Val Glu Pro

<210> 38

<211> 119

<212> PRT

<213> Homo sapiens

<400> 38

Leu Ile Ala Gly Gly Ile Asp Val Trp Gly Gln Gly Ser Leu Val Thr
1 5 10 15

Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro 20 25 30

Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val\$35\$

Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala 50 55 60

Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly 65 70 75 80

Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly
85 .90 .95

Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys
100 105 110

Val Asp Lys Lys Val Glu Pro 115

<210> 39

<211> 119

<212> PRT

<213> Homo sapiens

<400> 39

Leu Ile Ala Gly Gly Ile Asp Val Trp Gly Gln Gly Ser Leu Val Thr
1 10 15

Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro
20 25 30

Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val\$35\$ 40 45

Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala
50 55 60

Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly 65 70 75 80

Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly
85 90 95

Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys
100 105 110

Val Asp Lys Lys Val Glu Pro 115

<210> 40

<211> 123

<212> PRT

<213> Homo sapiens

<400> 40

Glu Thr Met Ala Ser Arg Lys Arg Ala Phe Asp Ile Trp Gly Gln Gly
1 5 10 15

Thr Met Val Thr Val Ser Ala Ala Ser Thr Lys Gly Pro Ser Val Phe 20 25 30

Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Gly Gly Thr Ala Ala Leu 35 40 45

Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp 50 60

- Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu 65 70 75 80
- Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Ser Val Pro Ser 85 90 95
- Ser Asn Leu Gly Thr Gln Thr Tyr Thr Cys Asn Val Asn His Lys Pro 100 105 110
- Ser Asn Thr Lys Val Asp Lys Thr Val Glu Leu 115 120